

CLAIMS

1. A method for authenticating a wireless device with a fixed station, the method comprising the steps of:

receiving a first authentication request from the wireless device when the wireless device detects that the fixed station is in close proximity, the first authentication request including a first unique identifier for identifying the wireless device and a second unique identifier for identifying the fixed station;

receiving a second authentication request from the fixed station when the fixed station detects that the wireless device is in close proximity, the second authentication request including the second unique identifier for identifying the fixed station; and

authenticating the wireless device with the fixed station based on whether the second unique identifier received in the first authentication request matches the second unique identifier received in the second authentication request, and also based on whether the first unique identifier received in the first authentication request is associated in an authentication database with the second unique identifier received in the second authentication request.

2. The method of claim 1, further comprising the step of reading the second unique identifier from the fixed station when the wireless device detects that the fixed station is in close proximity.

3. The method of claim 1,

wherein the first authentication request further includes a first time stamp based on when the wireless device detected that the fixed station was in close proximity,

the second authentication request further includes a second time stamp based on when the fixed station detected that the wireless device was in close proximity, and

in the authenticating step, the wireless device is authenticated with the fixed station only if the first time stamp received in the first authentication request substantially matches the second time stamp received in the second authentication request.

4. The method of claim 3, wherein the authenticating step includes the sub-step of transmitting a first pairing flag to both the wireless device and the fixed station if:

the first unique identifier received in the first authentication request is associated in the authentication database with the second unique identifier received in the second authentication request,

the second unique identifier received in the first authentication request matches the second unique identifier received in the second authentication request, and

the first time stamp received in the first authentication request substantially matches the second time stamp received in the second authentication request.

5. The method of claim 4, wherein the authenticating step includes the sub-step of transmitting a second pairing flag to both the wireless device and the fixed station if:

the first unique identifier received in the first authentication request is not associated in the authentication database with the second unique identifier received in the second authentication request,

the second unique identifier received in the first authentication request matches the second unique identifier received in the second authentication request, and

the first time stamp received in the first authentication request substantially matches the second time stamp received in the second authentication request.

6. The method of claim 5, further comprising the step of transferring a telephone number from the wireless device to the fixed station and temporarily transferring stored profile information from the wireless device to the fixed station, if the second pairing flag is received.

7. The method of claim 4, further comprising the step of transferring a telephone number from the wireless device to the fixed station and synchronizing stored profile information between the wireless device and the fixed station, if the first pairing flag is received.

8. The method of claim 1, wherein the fixed station is a LAN desktop telephone and the wireless device is a WLAN mobile telephone.

9. An authentication system comprising:

a wireless device that includes a first sensing mechanism and a first transmitter; and

a fixed station that includes a second sensing mechanism for detecting when the wireless device is in close proximity, and a second transmitter for transmitting a second authentication request when the second sensing mechanism detects that the wireless device is in close proximity, the second authentication request including a second unique identifier for identifying the fixed station,

wherein the first sensing mechanism detects when the fixed station is in close proximity, and the first transmitter transmits a first authentication request when the first sensing mechanism detects that the fixed station is in close proximity, the first authentication request including a first unique identifier for identifying the wireless device and the second unique identifier for identifying the fixed station, and

the system further comprises an authentication server for receiving the first and second authentication requests and authenticating the wireless device with the fixed station based on whether the second unique identifier received in the first authentication request matches the second unique identifier received in the second authentication request, and also based on whether the first unique identifier received in the first authentication request is associated in an authentication database with the second unique identifier received in the second authentication request.

10. The system of claim 9, wherein the wireless device reads the second unique identifier from the fixed station when the first sensing mechanism of the wireless device detects that the fixed station is in close proximity.

11. The system of claim 9,
wherein the first authentication request further includes a first time stamp based on when the first sensing mechanism detected that the fixed station was in close proximity,

the second authentication request further includes a second time stamp based on when the second sensing mechanism detected that the wireless device was in close proximity, and

the authentication server authenticates the wireless device with the fixed station only if the first time stamp in the first authentication request substantially matches the second time stamp in the second authentication request.

12. The system of claim 11, wherein the authentication server transmits a pairing flag to both the wireless device and the fixed station if:

the first unique identifier in the first authentication request is associated in the authentication database with the second unique identifier in the second authentication request,

the second unique identifier in the first authentication request matches the second unique identifier in the second authentication request, and

the first time stamp in the first authentication request substantially matches the second time stamp in the second authentication request.

13. The system of claim 12, wherein the wireless device sends a message to transfer a telephone number from the wireless device to the fixed station, if the pairing flag is received.

14. The system of claim 9, wherein the fixed station is a LAN desktop telephone and the wireless device is a WLAN mobile telephone.

15. An authentication server for authenticating a wireless device with a fixed station, the authentication server comprising:

a receiver for receiving a first authentication request from the wireless device when the wireless device detects that the fixed station is in close proximity, and a second authentication request from the fixed station when the fixed station detects that the wireless device is in close proximity, the first authentication request including a first unique identifier for identifying the wireless device and a second unique identifier for identifying the fixed station, and the second authentication request including the second unique identifier for identifying the fixed station;

an authentication database; and

a processor for determining whether to authenticate the wireless device with the fixed station based on whether the second unique identifier received in the first authentication request matches the second unique identifier received in the second authentication request, and also based on whether the first unique identifier received in the first authentication request is associated in an authentication database with the second unique identifier received in the second authentication request.

16. The authentication server of claim 15,

wherein the first authentication request further includes a first time stamp based on when the wireless device detected that the fixed station was in close proximity,

the second authentication request further includes a second time stamp based on when the fixed station detected that the wireless device was in close proximity, and

the processor authenticates the wireless device with the fixed station only if the first time stamp received in the first authentication request substantially matches the second time stamp received in the second authentication request.

17. The authentication server of claim 16, wherein the processor further includes a transmitter for transmitting a first pairing flag to both the wireless device and the fixed station if:

the first unique identifier received in the first authentication request is associated in the authentication database with the second unique identifier received in the second authentication request,

the second unique identifier received in the first authentication request matches the second unique identifier received in the second authentication request, and

the first time stamp received in the first authentication request substantially matches the second time stamp received in the second authentication request.

18. The authentication server of claim 17, wherein the transmitter transmits a second pairing flag to both the wireless device and the fixed station if:

the first unique identifier received in the first authentication request is not associated in the authentication database with the second unique identifier received in the second authentication request,

the second unique identifier received in the first authentication request matches the second unique identifier received in the second authentication request, and

the first time stamp received in the first authentication request substantially matches the second time stamp received in the second authentication request.